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### **REMARKS**

In view of the following remarks, the Applicants respectfully request reconsideration of the present application.

### **Objections and Rejections**

The Examiner's Action dated January 28, 2003, Paper no. \_:

1. finally rejects renumbered claims 124, 126-128 and 130,-134 under 35 U.S.C. § 103(a) as being obvious based upon United States Patent no. 2,792,617 entitled "Process of Heat Setting Thermoplastic Net in Rope Form and Product Produced Thereby" which issued May 21, 1957, on an application filed by John Walter Ecroyd Haller ("the Haller patent"); and
2. and declares renumbered claims 125, 129 and 135-138 to be allowable if rewritten into independent form.

### **Argument**

Applicants respectfully submit that, for the reasons set forth below, claims 124-138 are all allowable over the Haller patent.

In finally rejecting claims 124, 126-128 and 130,-134 for obviousness under 35 U.S.C. § 103(a) page 4 of the Examiner's Action dated January 28, 2003, states:

Applicant's arguments filed Nov 4, 2002 have been fully considered but they are not persuasive. Applicant argues that Haller shows cell bar 59 has the same orientation as the cell bar 59b' of Figure 9e of the present invention which is considered a right handed. Then cell bar 60 in Fig. 1 of Haller and the pitch lines in cell bar 59a' of the present invention has an orientation opposite to the

cell bar 59a' of Fig. 9e of the present invention which is left handed. Applicant then states that cell bars 59 and 60 of Haller are both right handed. However, since the line that makes up the cell bars is reversed; hence one of the cell bars is left handed.

The accompanying declaration of Sherif Safwat, particularly Exhibits C and D thereto, graphically illustrates the fallacious of the statement quoted above from the Examiner's Action. Because, in the context of definitions for left handed and right handed cell bars specifically set forth in the pending application; the Examiner's Action's analysis of the disclosure of the Haller patent quoted above is erroneous; Applicants respectfully:

1. submit that claims 124, 126-128 and 130,-134 traverse rejection under 35 U.S.C. § 103(a) based upon the Haller patent; and
2. ~~request that the rejection be withdrawn.~~

If there be any further need to traverse the rejection set forth in the January 28, 2003, Examiner's Action of claims 124, 126-128 and 130,-134 under 35 U.S.C. § 103(a) based upon the Haller patent, Applicants observe that none of pending claims 124-138, the texts of which appear in Exhibit A attached hereto, require that cell bars have a right handed or left handed orientation.

For example, renumbered independent claim 124 recites that:

cell bars [are] formed with a plurality of cambered sections that are oriented and configured so that movement of cell bars through the water environment relative to said vector creates a pressure differential across the cambered sections, thereby establishing a lift vector on the cell bar in a predetermined direction.

Renumbered independent claim 133 recites:

- (a) assembling the trawl net by:
  - i. interconnecting mesh cells, each of said mesh cells including at least two cell bars, portions of at least one of said at least two cell bars being formed with a plurality of cambered sections.

Renumbered independent claim 134 recites:

- ii. forming cambered-sectioned cell bars having a first and a second product strand by:
  - (A) extending the first product strand along an axis of symmetry of cell bars; and
  - (B) twisting the second product strand around the first product strand and about the axis of symmetry in helical fashion.

In almost the same words, renumbered independent claim 135 recites:

- ii. forming cambered-sectioned cell bars having a first product strand and a second product strand that has a smaller diameter than the first product strand by:
  - (A) extending the first product strand along an axis of symmetry of cell bars; and
  - (B) twisting the second product strand around the first product strand and about the axis of symmetry in helical fashion.

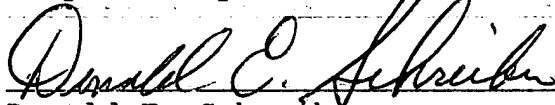
Consequently, even if contrary to fact the Haller patent were to disclose both left handed and right handed cell bars, Applicants respectfully submit that it does not disclose nor does it suggest cell bars of a type encompassed by pending renumbered independent claims 128 and 133-135. For this second reason, Applicants respectfully:

1. submit that claims 124, 126-128 and 130,-134 traverse rejection under 35 U.S.C. § 103(a) based upon the Haller patent; and
2. request that the rejection be withdrawn.

**Conclusion**

Since for the reasons set forth above the Haller patent fails to disclose or to suggest the subject matter encompassed by pending, renumbered claims 124-138, Applicants respectfully submit that claims 124, 126-128 and 130,-134 traverse rejection under 35 U.S.C. § 103(a) based upon the Haller patent. Because claims 124, 126-128 and 130,-134 traverse rejection under 35 U.S.C. § 103(a) based upon the Haller patent, the Applicants respectfully submit that claims 124-138 are allowable. For the preceding reasons, the Applicants respectfully request favorable reconsideration and allowance of renumbered claims 124-138 presently pending in this application.

Respectfully submitted



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124. (Renumbered) A trawl net used for fishing, said net being capable of being drawn through the water so that a water velocity vector is created relative to the trawl net, the trawl net comprising a plurality of interconnected mesh cells, each of said mesh cells including at least two cell bars that are constructed and arranged so that said at least two cell bars intersect said velocity vector at an acute angle, portions of at least one of said at least two cell bars being formed with a plurality of cambered sections that are oriented and configured so that movement of cell bars through the water environment relative to said vector creates a pressure differential across the cambered sections, thereby establishing a lift vector on the cell bar in a predetermined direction.

125. (Renumbered) The trawl net of Claim 124 wherein cambered sections include a strap.

126. (Renumbered) The trawl net of Claim 124 wherein cambered sections include at least two product strands.

127. (Renumbered) The trawl net of Claim 126 wherein the product strands forming the cambered sections have minimum residual torque.

128. (Renumbered) The trawl net of Claim 126 wherein at least one of the product strands is selected from a group consisting of braided product strands and twisted product strands.

129. (Renumbered) The trawl net of Claim 126 wherein product strands are enclosed within a side wall which establish a cavity for receiving the product strands.

130. (Renumbered) The trawl net of Claim 126 wherein the cambered sections include a corkscrew-shaped member.

131. (Renumbered) The trawl net of Claim 124 wherein the lift vector for cell bars having cambered sections is directed outward from the trawl net.

132. (Renumbered) The trawl net of Claim 131 wherein cambered sections having outwardly directed lift vectors are located in both side panels included in the trawl net.

133. (Renumbered) An improved method for catching fish with a trawl net comprising the steps of:

(a) assembling the trawl net by:

5 i. interconnecting mesh cells, each of said mesh cells including at least two cell bars, portions of at least one of said at least two cell bars being formed with a plurality of cambered sections;

(b) from a vessel disposed on a surface of a body of water:

10 i. deploying into a body of water as part of the trawl net cell bars having cambered sections; and

ii. propelling at least cell bars having cambered sections through the body of water relative to a water flow vector that is neither parallel nor perpendicular to cambered-sectioned cell bars, so that movement of cell bars through the water environment relative to the water flow vector creates a pressure differential across cambered sections, thereby establishing a lift vector for cambered-sectioned cell bars in a predetermined direction.

134. (Renumbered) The method of Claim 133 wherein step (a) of assembling the trawl further comprises a step of:

ii. forming cambered-sectioned cell bars having a first and a second product strand by:

(A) extending the first product strand along an axis of symmetry of cell bars; and

(B) twisting the second product strand around the first product strand and about the axis of symmetry in helical fashion;

whereby the second product strand forms a series of turns in contact with an outer surface of the first product strand.

135. (Renumbered) The method of Claim 133 wherein step (a) of assembling the trawl further comprises a step of:

ii. forming cambered-sectioned cell bars having a first product strand and a second product strand that has a smaller diameter than the first product strand by:



(A) extending the first product strand along an axis of symmetry of cell bars; and

(B) twisting the second product strand around the first product strand and about the axis of symmetry in helical fashion;

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whereby the second product strand forms a series of turns in contact with an outer surface of the first product strand.

136. (Renumbered) The method of Claim 133 wherein step (a) of assembling the trawl further comprises a step of:

ii. forming cambered-sectioned cell bars from a strap.

137. (Renumbered) The method of Claim 136 wherein the step of forming cambered-sectioned cell bars from a strap further includes attaching together two lengths of strapping material.

138. (Renumbered) The method of Claim 136 wherein the step of forming cambered-sectioned cell bars from a strap further includes sewing together two lengths of strapping material.